Water Quality Report Card	
Regional Water Board:	**Central Coast, Region 3**
Beneficial Uses Affected:	MUN
Implemented Through:	Conditional Waiver of WDR
Effective Date:	March 1, 2005
Attainment Date:	2015

Nitrate-N in Los Osos Creek and Warden Creek

STATUS

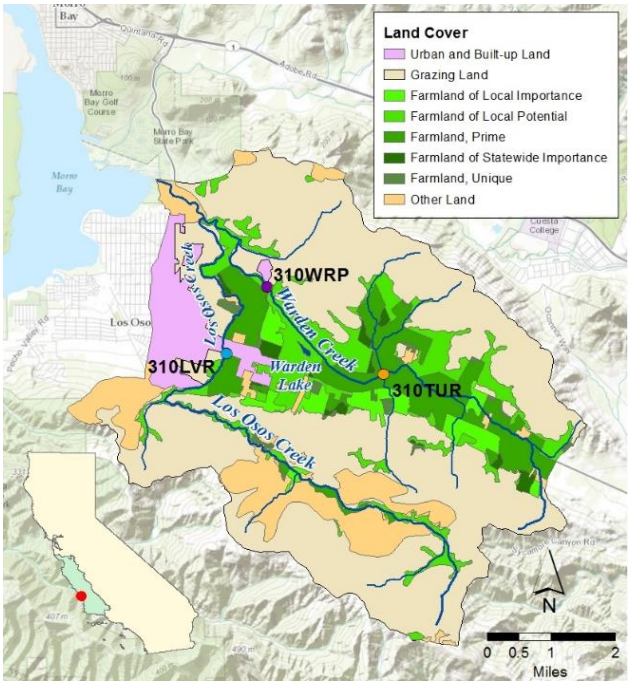
- ☐ Conditions Improving
- ☐ Data Inconclusive
- ☑ **Improvement Needed**
- ☐ Targets Achieved/Waterbody Delisted

Pollutant Type: ☐ Point Source ☑ Nonpoint Source ☐ Legacy

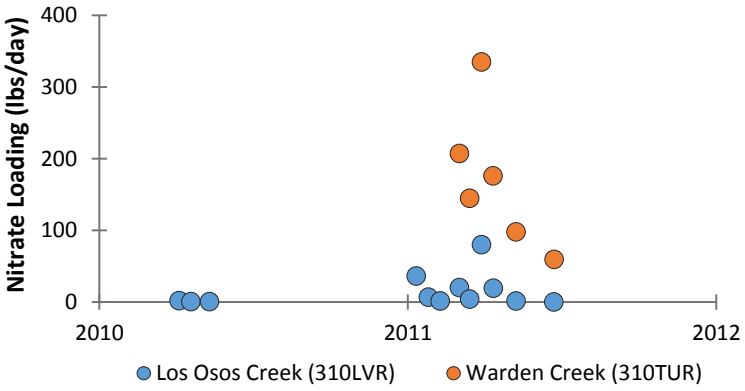
Water Quality Improvement Strategy

Los Osos Creek and its tributary, Warden Creek, are located in the Los Osos Creek Watershed in San Luis Obispo County, on the central coast of California. The creeks were identified as impaired for nutrients in 1998, specifically nitrate-nitrogen, due to discharges from agricultural cropland, and were added to the 303(d) list in 2002. Nitrate-N levels exceed Basin Plan objectives for the protection of the municipal water supply beneficial use (MUN). To address the impairment, Region 3 adopted the Los Osos Creek, Warden Creek, and Warden Lake Wetland Nutrient TMDL in 2004. To protect the MUN beneficial use, the TMDL established a receiving water nitrate-N concentration numeric target that is equal to the existing Basin Plan water quality objective of 10 mg/L nitrate-N. The TMDL also established an implementation plan to achieve the numeric target through the use of the 2012 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Ag Order), and accompanying Monitoring and Reporting Program. The TMDL implementation schedule calls for the achieving nitrate-N target in Los Osos Creek Watershed by January 2015.

Los Osos Creek Watershed



Agricultural Nitrate Loading in Los Osos and Warden Creeks

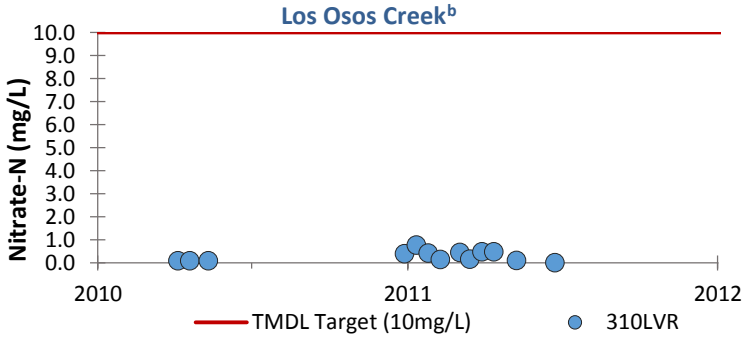


Water Quality Outcomes

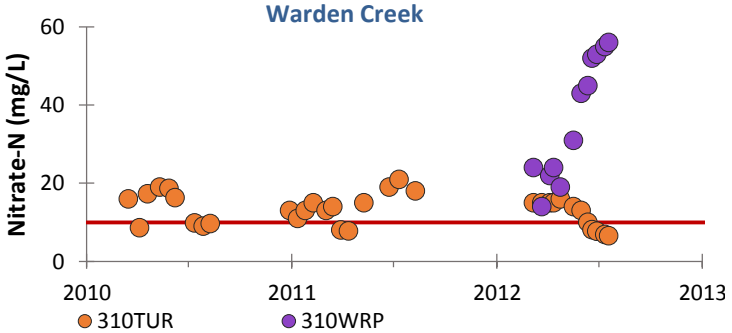
- *Water quality data demonstrate that the numeric target and loading allocations for nitrate-N in Los Osos Creek are being achieved up-stream of, and at, monitoring site 310LVR.*
- *Water quality data demonstrate that the numeric target and loading allocations for nitrate-N in Warden Creek are not being achieved.*
- *Region 3 staff will conduct a review of implementation activities when monitoring and reporting data from all watershed monitoring sites are submitted.*
- *Region 3 staff will continue Ag Order implementation and monitoring efforts in the Los Osos Creek Watershed.*

Los Osos Creek and Warden Creek Water Quality[a]

Los Osos Creek[b]



Warden Creek



[a] See Central Coast Ambient Monitoring Program (CCAMP) website for additional water quality monitoring data.

[b] Los Osos Creek is not listed as impaired for nitrate, however it is listed for Dissolved Oxygen (DO). Because DO levels are a function of nutrients, solar exposure, temperature, flow and other environmental conditions, management of these variables (including lowering nitrate-N levels) are used to promote healthy DO levels in surface waters.

Released October 2014

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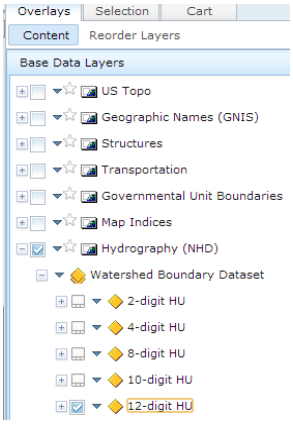
Please answer the questions below.

NOTE: *The information below will **not** be posted; it will be used to prioritize implementation actions and to develop USEPA Measure W and Success Story Reports.*

1. Select the Pollutant Category (from pulldown menu) for this impaired waterbody: Nutrients

2. Provide watershed location by Hydrologic Unit(s) (HUC) at HUC 12 level. Please include all HUC 12 values for the watershed.

   The HUC12 Code is 12 digits; the stream reach code is 14 digits. HUC12 can be identified using the USGS National Map Viewer (http://viewer.nationalmap.gov/viewer/). Turn on HUC12 layer by clicking through the following pull downs on the right side of the page: Overlays>Content>Base Data Layers >Hydrography (NHD)>Watershed Boundary Dataset>12-digit HU.



   - HUC 12: 180600060502
   - HUC 12: _____
   - HUC 12: _____

3. List the Major Stakeholder Groups (e.g. Ag, Stormwater, Watershed groups, etc.) Include SWB and RWQCB programs.
   - San Luis Obispo County
   - Ag commissioner
   - Water Board (TMDL and Irrigated Agriculture Programs)
   - Irrigated Agricultural growers in the watershed

4. Provide the following information for each implementation action taken *(if you require more rows to describe implementation actions, please add them)*:

Implementation Action	Result of Implementation Action	Action Taken By (Y/N)		
		Discharger	319 Staff	Other
Agriculture Conditional Waiver of WDRs – growers implement BMPs to reduce discharge associated with operations	Intent is to improve water quality in Los Osos Creek watershed	Y	Y	Y

5. Has the State devoted any resources to these implementation actions? (If CWA 319(h) grant project funds were used p*lease provide the grant project numbers.)*

Funding Resource	Yes	No
CWA 319(h) Grant Project Funds	X	
Prop 84, 50, 40, 13, etc. funds		X
State Revolving Fund		X
Other (Please specify funding source) _____		X

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6. Have the Dischargers devoted any private resources to these implementation actions? (Briefly describe sources of funds).

   Yes, growers contributed match dollars when participating in 319(h) implementation projects. Growers are responsible for implementation of management practices to protect water quality.

7. What are the next steps based upon results described in question #3?
   (If you require more rows to describe next steps, please add them.)

Next/Needed Steps	Expected Execution	By Who
Continue implementation of Ag program throughout the watershed	ongoing	Water Board Staff and private parties

Status Definitions *(select checkbox for one (1) status that best describes the Water Quality Improvement project)*

Conditions Improving

Water quality data and/or other indicators demonstrate improvement; **BUT**
The final water quality targets not consistently being met.

Data Inconclusive

Not enough data (of acceptable quality) has been collected to demonstrate that the water quality targets are consistently met; **OR**
Variability in data do not permit a determination in water quality trends (positive or negative).

Improvement Needed

Final water quality targets not consistently met; **AND**
In Water Board staff judgment, water quality data and/or other indicators demonstrate that water quality is either declining or not improving.

Targets Achieved/ Waterbody Delisted

Water quality data or other information demonstrate that final water quality targets are consistently met; **OR**
The waterbody has been removed from the 303(d) list.

Glossary *(on Outcomes Page)*

Attainment Date

The attainment date is the projected year water quality targets are expected to be achieved. The attainment date is estimated based on available information at the time of the most recent update to the water quality restoration plan. The attainment date is subject to change.

Beneficial Uses

Beneficial uses define the uses of water. The California Water Code defines beneficial uses of the waters of the state as uses that may be protected against quality degradation include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Effective Date

The effective date is the date upon which the TMDL or other implementation action (e.g., Cleanup and Abatement Order) is considered to take effect.

Impaired Water (Listing)

An impaired water is a waterbody that does not meet the water quality objectives or protect the beneficial uses of the water due to the presence of one or more pollutants. Such waters are identified on the Water Boards' Clean Water Act Section 303(d) list. These impaired waters are sometimes called "listings".

Implementation Outcome Status Assessed

A summary report has been prepared showing the outcome of implementing water quality restoration plans (TMDLs or other approach) that have already been adopted. It is important to note that Regional Boards may be

implementing water quality restoration plans (e.g., incorporating TMDL requirements into permits, reviewing water quality data, etc.) for projects for which a Water Quality Improvement Report Card has not yet been created.

Pollutant

A pollutant is a waste or substance that alters the quality of the waters to a degree which unreasonably affects the waters for beneficial uses. The monitoring programs of the Water Boards and others provide information on the levels of pollutants in the State's waters.

Pollutant Type *(select checkboxes for all applicable pollutant types)*

Point Source Pollutant

Point source pollutants are pollutants that are, or may be, discharged from any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft.

Nonpoint Source (NPS) Pollutant

Nonpoint source pollutants are pollutants that are or may be discharged from diffuse sources without a single identifiable point of origin. These discharges include, but are not limited to, runoff from agriculture, forestry, grazing, hydromodification, wetlands, and marinas and recreational boating activities.

Legacy Pollutant

Legacy pollutants are pollutants that are primarily the result of historical contributions. Legacy pollutants are the residual from activities such as mining, manufacturing, and agricultural no longer practiced and include some pollutants currently banned by regulation. These pollutants have the common characteristic of persistence in the environment and may have an affinity for sediments. Typically, the decline in environmental legacy pollutant concentrations occurs as a result of natural attenuation processes. The pesticide DDT is an example of a legacy pollutant.

Water Quality Objective

The limit or level of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

Water Quality Target

The water quality target is a description of the desired condition in the watershed or waterbody. Typically, targets are tied to specific water quality standards that provide measurable goals for the water quality restoration plan.